

ABSTRACT

A plasma processing device comprises a chamber capable of maintaining an atmosphere depressurized less than atmospheric pressure, a transfer pipe connected to the chamber, a gas introduction mechanism for introducing a gas into the transfer pipe, and a microwave supply source for introducing a microwave from outside to inside of the transfer pipe. The plasma processing device can form a plasma of the gas in the transfer pipe and perform plasma processing on a workpiece placed in the chamber. The transfer pipe is connected to have an opening in an inner wall of the chamber, the inner wall being generally perpendicular to a major surface of the workpiece. The workpiece is not provided on direct line of sight from the plasma.